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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,457	02/24/2004	Kosuke Yamaguchi	09812.0409	8573

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EXAMINER

NGUYEN, KEVIN M

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/785,457	Applicant(s) YAMAGUCHI ET AL.	
	Examiner Kevin M. Nguyen	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/3/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seidl (US 5,583,977) in view of Kato et al (US 6,297,795, hereinafter Kato).

3. As to claim 1, Seidl teaches a three-dimensional object manipulating apparatus, comprising:

a display means for displaying a three-dimensional object on the screen of a display unit (*a display unit, and a 3-D object 301, in figs. 1-3*);

a rotation-axis setting means for setting an axis of rotation for the three-dimensional object on the basis of a push-in made of a dial, which can be pushed in and rotated, of a dial-operated input device (*a computer mouse input device is clicked to select a rotational axis X for rotating about the axis X*);

a detection means for detecting the direction and angle of a rotation made of the dial of the dial-operated input device (*a 3-D controller device instructs the commands for identifying the direction, and an angle of rotation in col. 5, lines 38-44*); and

an object rotating means for rotating the three-dimensional object being displayed on the screen of the display unit about the axis of rotation set by the rotation-axis setting means on the basis of the direction and angle of rotation, detected by the

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detection means, of the dial of the dial-operated input device (*said 3-D object rotates about said axis X, and the angle of rotation, see col. 6 and col. 8 for further operation*).

Accordingly, Seidl teaches all of the claimed limitation of claim 1, except for pushing and rotating modes of a dial-operated input device.

Kato teaches an object being displayed on the screen that is manipulated pressing operation and rotating operation by a rotary switch 12 in figs. 4 and 6-8, col. 8, line 66 through col. 9, line 6.

As to claim 4, the combination of Seidl and Kato teaches the apparatus as set forth in claim 1, wherein: the detection means further has a function of detecting a speed at which the dial of the dial-operated input device has been rotated; and the object rotating means rotates the three-dimensional object at a speed corresponding to the speed of rotation, detected by the detection means, of the dial-operated input device in col. 9, line 65 through col. 10, line 9 of Seidl, and in col. 8, lines 14-19 of Kato.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Kato into Seidl to create the claimed invention. It would have been obvious to modify Seidl to become pressing and rotating modes of the rotary switch as taught by Kato because this would improve more intuitive of the single rotary switch that allow users to execute desired quick and easy application program without repeating on a toolbar (col. 3, lines 9-11, col. 4, lines 58-59, and col. 2 of Kato). The motivation for doing so would apply various input devices (col. 5, lines 38-44 of Seidl), and would apply various types of display data (col. 8, line 38 of Kato).

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4. As to claim 2, Seidl teaches a three-dimensional object manipulating apparatus, comprising:

a display means for displaying a three-dimensional object on the screen of a display unit (*a display unit, and a 3-D object 301, in figs. 1-3*);

a moving-axis setting means for setting an axis of movement for the three-dimensional object on the basis of a push-in made of a dial, which can be pushed in and rotated, of a dial-operated input device (*a computer mouse input device is clicked to select a rotational axis X for rotating along (move) the axis X in fig. 4*);

a detection means for detecting the direction and angle of a rotation made of the dial of the dial-operated input device (*a 3-D controller device instructs the commands for identifying the direction, and an angle of rotation in col. 5, lines 38-44*); and

an object moving means for moving the three-dimensional object being displayed on the screen of the display unit along the axis of movement set by the moving-axis setting means on the basis of the direction and angle of rotation, detected by the detection means, of the dial of the dial-operated input device (*said 3-D object rotates along said axis X, and the angle of rotation, see col. 6 and col. 8 for further operation*).

Accordingly, Seidl teaches all of the claimed limitation of claim 2, except for pushing and rotating modes of a dial-operated input device.

Kato teaches an object being displayed on the screen that is manipulated pressing operation and rotating operation by a rotary switch 12 in figs. 4 and 6-8, col. 8, line 66 through col. 9, line 6.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Kato into Seidl to create the claimed invention. It would have been obvious to modify Seidl to become pressing and rotating modes of the rotary switch as taught by Kato because this would improve more intuitive of the single input operation that allow users to execute desired quick and easy application program without repeating on a toolbar (col. 3, lines 9-11, col. 4, lines 58-59, and col. 2 of Kato). The motivation for doing so would apply various input devices (col. 5, lines 38-44 of Seidl), and would apply various types of display data (col. 8, line 38 of Kato).

As to claim 5, the combination of Seidl and Kato teaches the apparatus as set forth in claim 2, wherein: the detection means further has a function of detecting a speed at which the dial of the dial-operated input device has been rotated; and the object moving means moves the three-dimensional object at a speed corresponding to the speed of rotation, detected by the detection means, of the dial-operated input device in col. 9, line 65 through col. 10, line 9 of Seidl, and in col. 8, lines 14-19 of Kato.

5. As to claim 3, Seidl teaches a three-dimensional object manipulating apparatus, comprising:

a display means for displaying a three-dimensional object on the screen of a display unit (*a display unit, and a 3-D object 301, in figs. 1-3*);

a detection means for detecting the direction and angle of a rotation made of a dial of a dial-operated input device (*a 3-D controller device instructs the commands for identifying the direction, and an angle of rotation in col. 5, lines 38-44*); and

an object scale-up/-down means for scaling up or down the three-dimensional object being displayed on the screen of the display unit on the basis of the direction and angle of rotation, detected by the detection means, of the dial of the dial-operated input device (*said 3-D object are changing larger scale or smaller scale, see fig. 4, col. 6, and col. 8 for further operation*).

Accordingly, Seidl teaches all of the claimed limitation of claim 3, except for rotating mode of a dial-operated input device.

Kato teaches an object being displayed on the screen that is manipulated rotating operation by a rotary switch 12 in figs. 4 and 6-8, col. 8, line 66 through col. 9, line 6.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Kato into Seidl to create the claimed invention. It would have been obvious to modify Seidl to become rotating mode of the rotary switch as taught by Kato because this would improve more intuitive of the single rotary switch that allow users to execute desired quick and easy application program without repeating on a toolbar (col. 3, lines 9-11, col. 4, lines 58-59, and col. 2 of Kato). The motivation for doing so would apply various input devices (col. 5, lines 38-44 of Seidl), and would apply various types of display data (col. 8, line 38 of Kato).

As to claim 6, the combination of Seidl and Kato teaches the apparatus as set forth in claim 3, wherein: the detection means further has a function of detecting a speed at which the dial of the dial-operated input device has been rotated; and the object scale-up/-down means scales up or down the three-dimensional object being

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displayed on the screen of the display unit at a scale-varying rate corresponding to the speed of rotation, detected by the detection means, of the dial-operated input device in col. 9, line 65 through col. 10, line 9 of Seidl, and in col. 8, lines 14-19 of Kato.

6. The limitation of claim 7 is similar to those of claim 1, though in method form, therefore the rejection of claim 7 will be treated using the same rationale as claim 1.

7. Claim 10 shares the same limitation as those of claim 4 and therefore the rationale for rejection will be the same.

8. The limitation of claim 8 is similar to those of claim 2, though in method form, therefore the rejection of claim 8 will be treated using the same rationale as claim 2.

9. Claim 11 shares the same limitation as those of claim 5 and therefore the rationale for rejection will be the same.

10. The limitation of claim 9 is similar to those of claim 3, though in method form, therefore the rejection of claim 9 will be treated using the same rationale as claim 3.

11. Claim 12 shares the same limitation as those of claim 6 and therefore the rationale for rejection will be the same.

12. The limitation of claim 13 is similar to those of claim 1, though in computer program form, therefore the rejection of claim 13 will be treated using the same rationale as claim 1.

13. The limitation of claim 14 is similar to those of claim 2, though in computer program form, therefore the rejection of claim 14 will be treated using the same rationale as claim 2.

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14. The limitation of claim 15 is similar to those of claim 3, though in computer program form, therefore the rejection of claim 15 will be treated using the same rationale as claim 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN M. NGUYEN whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, a supervisor RICHARD A. HJERPE can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Patent Application Information Retrieval system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Kevin M. Nguyen
Patent Examiner
Art Unit 2629

KMN
February 2, 2007